

STATE OF NORTH CAROLINA

Approved Classification: _____

OFFICE OF STATE PERSONNEL

Effective Date: _____

Analyst: _____

POSITION DESCRIPTION FORM (PD-102R-92)

(This Space for Personnel Dept. Use Only)

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| 1. Present Classification Title of Position Transportation Technician II | 7. Pres. 15 Digit Position No. | Prop. 15 Digit Pos. No. |
| 2. Usual Working Title of Position Transportation Technician II | 8. Department, University, Commission, or Agency Transportation | |
| 3. Requested Classification of Position Transportation Technician II | 9. Institution & Division Highways | |
| 4. Name of Immediate Supervisor | 10. Section and Unit Location & Surveys | |
| 5. Supervisor's Position Title & Position Number TE II - Property Surveys | 11. Street Address, City and County 1020 Birch Ridge Dr. Raleigh N.C. | |
| 6. Name of Employee | 12. Location of Workplace, Bldg. And Room No. Century Center Bldg. B Room 199 | |

I. A. Primary Purpose of Organizational Unit:

The primary purpose of Location & Surveys is to serve as support services in providing engineering analysis, mapping and other data for the design of transportation facilities and the acquisition of property for the construction of transportation facilities.

B. Primary Purpose of Position:

This is a journeyman level technical position supporting higher level technicians and engineers. Employee may perform a full range of standard electronic design drafting, a variety of calculations and computations. Work includes adding survey data to maps at CADD workstations, and enhancing preliminary property survey maps for final condemnation exhibits.

C. Work Schedule:

Normal work hours are 7:30 AM to 4:30 PM, Monday through Friday, with 1 hour for lunch. Flex time or seasonably variable work hours may be used in individual offices based upon needs and circumstances.

D. Change in Responsibilities or Organizational Relationship:

Duties of position have not changed. This is a definition of present duties as they exist.

- II. A. DESCRIPTION OF RESPONSIBILITIES AND DUTIES: Method Used (Check One) Order of importance____
 Sequential order_____

Place an asterisk (*) next to each essential function. (See instructions for complete explanation.) Please note percentage of time for each function.

No. %

- 1 60 **Condemnation Map Preparation** - Prepare final condemnation maps on CADD workstation by reproducing preliminary maps in graphic environment using GEOPAK software. Compute necessary areas (total area, new right of way and other easements, remaining areas) for revisions to maps due to changes in plans, using GEOPAK and other engineering/surveying software and computers. Accurately read and interpret property survey legal files to ensure the description of action and survey covers all contiguous property, and that copies of all necessary documents (deeds, plats, right of way agreements) are included in file.
- 2 15 **Property Tie Computations** - Compute and check property line ties and distances necessary to complete property files for plan sheets.
- 3 10 **Electronic File Transfer** - Receive and transmit electronic files to and from field offices and other Units of NCDOT.
- 4 5 **Exhibit Preparation** - Locate and order aerial photographs to be used to digitize or have scanned to locate necessary topographic features on subject properties. Manipulate scanned photography for purposes of exhibit preparation. Create charts or other graphic products as requested by the NC Attorney General's office to be used as exhibits in NCDOT litigation such as right of way condemnations.
- 5 5 **Right of Way Computations** - Compute alignments and necessary right of way takes for settlements as requested by Right Of Way Branch.
- 6 5 **Other** - Perform other duties as required by supervisor.

II. B. OTHER POSITION CHARACTERISTICS: (con't)

1. Accuracy Required in Work:

Engineering measurements and calculations necessary to millimeter reporting is required. A thorough knowledge of necessary data and proper format is needed.

2. Consequence of Error:

Errors cause delays in the completion of plans, erroneous design, and costly revisions. Errors in mapping and exhibits could cause erroneous right of way agreements and settlements, postponements of court cases and monies paid for incorrect right of way. This can cause problems not only for the project on which work is being performed, but also when legal documents are drawn from plans and maps which contain errors it will effect property surveys of and around subject property for many years to come.

3. Instructions Provided to Employee:

Position requirements include sufficient experience and knowledge to enable the employee to perform the duties of this position. Goals are defined and procedural guidelines are established. Deadlines are established when applicable. It is usually up to the employee to ensure completion of tasks in a timely and accurate manner, and to determine the best method to resolve issues, provide and present data, or prepare for the assigned task. Instructions may be either oral or written and may be general or specific in nature, according to the scope of the work.

4. Guides, Regulations, Policies and References Used by Employee:

NCDOT Highway Design Manual; CADD and other computer references and manuals; dictionary. Uses applicable NCDOT standard engineering and surveying procedures and practices as received from higher level technicians and engineers.

5. Supervision Received by Employee:

This employee is under the supervision of the Property Survey Engineer. Technical problem areas are either resolved at this level or passed up to higher level technicians or engineers for involvement or resolution. Tasks and duties may be reviewed during and after completion.

6. Variety and Purpose of Personal Contacts:

Employee must be able to communicate effectively with fellow employees and other units in gathering necessary project data.

7. Physical Effort:

Strenuous physical effort is not usually required however, stress management is a major concern. Duties require long periods of work at CADD workstations which involves intense concentration. Some physical labor such as traversing rough terrain, chopping brush, or carrying heavy or cumbersome equipment may be requested at times. Travel to different areas of the state may be required for some tasks.

8. Work Environment and Conditions:

Work is primarily limited to office duties located in the central office of the Location and Surveys Unit, with some exposure to hazardous chemical spray in exhibit preparation. Employee may be requested to work with a field survey crew on special projects. Outside work may occur in any type of geographic conditions, at any time of day.

9. Machines, Tools, Instruments, Equipment and Materials Used:

A general knowledge of all field engineering surveying instruments such as theodolites, electronic distance measuring devices, and office machinery including calculator, computers, and CADD workstations. Mainframe terminal, PC computers, calculators and CADD workstations are used on a daily basis.

10. Visual Attention, Mental Concentration and Manipulative Skills:

Close visual attention is required during computations, CADD operations, review and checking of maps and legal documents contained in the legal file. Employee must be prepared to make sound decisions on short notice. Mental alertness is vital while making decisions involving engineering principles and applications.

11. Safety for Others:

Most of the work performed by the employee is independent of other employees. However, practical application of work duties and an overall concern for fellow employees must be executed and ever present in the mind of all employees.

12. Dynamics of Work:

Court exhibits may go through several revisions based upon the needs of attorneys and the direction of court cases, often with very short notice. Software for electronic instrumentation and CADD use by Location and Surveys is updated continuously. Property survey condemnations are increasing each year. Personnel and scheduling changes must be made to assure that due dates are met.

III. KNOWLEDGES, SKILLS & ABILITIES AND TRAINING & EXPERIENCE REQUIREMENTS:

A. Knowledges, Skills and Abilities:

A general knowledge of the principles and practices of CADD mapping and surveying as it relates to the location and design of highways with a particular emphasis on route, geodetic, and cadastral surveying and mapping principles. A knowledge of legal aspects of land surveying as it relates to right of way condemnation procedures. An understanding of the organization and operation of the North Carolina Department of Transportation. An ability to interpret plans, policies and specifications. A general knowledge of mathematical functions including algebra, geometry, and trigonometry.

B. 1. Required Minimum Training:

Graduation from a two year technical college with a degree in Civil Engineering or Survey Technology and two years of progressive transportation experience.

2. Additional Training/Experience:

Additional training as needed will be supplied by supervisor and Location & Surveys Unit or NCDOT Training Personnel.

3. Equivalent Training and Experience:

Graduation from high school and four years of progressive transportation technician experience; or an equivalent combination of training and related experience.

C. License or Certification Required by Statute or Regulation:

NC Driver's License is required.

IV. CERTIFICATION: Signatures indicate agreement with all information provided, including designation of essential functions.

Supervisor's Certification: I certify that (a) I am the Immediate Supervisor of this position, that (b) I have provided a complete and accurate description of responsibilities and duties and (c) I have verified (and reconciled as needed) its accuracy and completeness with the employee.

Signature _____ Title: _____ Date: _____

Employee's Certification: I certify that I have reviewed this position description and that it is a complete and accurate description of my responsibilities and duties.

Signature _____ Title: _____ Date: _____

Section or Division Manager's Certification: I certify that this position description, completed by the above named immediate supervisor, is complete and accurate.

Signature _____ Title: _____ Date: _____

Department Head or Authorized Representative's Certification: I certify that this is an authorized, official position description of the subject position.

Signature _____ Title: _____ Date: _____